

Work Order ID 158409

158409

Wednesday, March 22, 2017 10:41:55 AM

Ship Monday

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Item ID: D350-591-113 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Heli-Access Step, Short, High Gear
 Start Date: 3/22/2017 Start Qty: 3.00 *3* Cust Item ID:
 Required Date: 4/5/2017 Req'd Qty: 3.00 *3* Customer:
 Reference: SCHEDULED

Approvals: Process Plan: JMF Date: 17-3-27 Tooling: Date: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2310	D								
DSI 9525	A								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D350-591-113								
110	Large Fab	0.00							
110									
Large Fab	Memo	0.90							
Large Fab	1-Cut D2244 extrusion to 62.00" long as per Dwg D2310								
	2-Drill extrusion as per Dwg D2310 using drill Jig DT8230								
	3-Deburr								

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3x DC 2017/03/22

B# 158409 x3

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Revision ID: _____ Accept ***N900040100*** Setup Start ***NS1***
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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.06				<u>3</u>	<u>MAR 21 2017</u>		<u>DAS</u> <u>24</u> <u>9-89</u>
123 *123* Mill Conv Conventional Milling Machine	Memo OPEN HOLE FOR BUSHING TO SIZE AS PER DWG AND C'SINK.	0.00 0.60				<u>3</u>			<u>24 17/03/2017</u> <u>AB 22-3 17</u>
126 *126* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.06				<u>3</u>	<u>MAR 22 2017</u>		<u>DAS</u> <u>24</u> <u>9-89</u>

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Quality Control

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Item ID: D350-591-113

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Heli-Access Step, Short, High Gear

Start Date: 3/22/2017 Start Qty: 3.00

3

Cust Item ID:

Required Date: 4/5/2017 Req'd Qty: 3.00

3

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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150

QC5- Inspect part completeness to step on W/O

0.00

150

QC

Memo

0.06

Quality Control

(3) 17-03-24

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9
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160

Chemical Conversion Coat per QSI005 4.1

0.00

160

HandFinish

Memo

0.78

Hand Finishing

(x9) 201703/24
823

170

Large Fab

0.00

170

Large Fab

Memo

0.84

Large Fab

1-Rivet as per Dwg D2310
2-Inspect for foreign object as per QSI 024
3-Weld Aft end cap as per Dwg D2310
A/R AL ROD Batch: 134785
4-Grind end cap welds flush

3

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Revision ID:

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Start Date: 3/22/2017 Start Qty: 3.00

3

Cust Item ID:

Required Date: 4/5/2017 Req'd Qty: 3.00

3

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

180	QC10- Inspect visual per QSI004- ground welds	0.00							
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180

QC

Memo

0.00

Quality Control

① 17-03-27DAS
9
9-89

190	QC5- Inspect part completeness to step on W/O	0.00							
-----	---	------	--	--	--	--	--	--	--

190

QC

Memo

0.06

Quality Control

① 17-03-27DAS
9
9-89

200	Chemical Conversion Coat per QSI005 4.1	0.00							
-----	---	------	--	--	--	--	--	--	--

200

HandFinish

Memo

0.24

Hand Finishing

① 13 20170327
BEB

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 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210 *210* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>M 136657.</i> Memo START TIME: <i>2:40</i> OVEN TEMPERATURE: <i>320°</i> FINISH TIME: <i>2:40</i>	0.00 0.55				<i>3</i>	<i>0</i>	<i>170327</i>	<i>33</i>
220 *220* HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch <i>M137092</i> Memo ***Install Dart labels after wing walk***	0.00 0.80				<i>(X3)</i>	<i>0</i>	<i>2017/03/27</i>	<i>BEB</i>
230 *230* QC Quality Control	QC3- Inspect Part Finish Memo ***Install Dart labels after wing walk***	0.00 0.03				<i>3</i>			<i>DAS 38 9-89</i> MAR 28 2017

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Start Date: 3/22/2017 Start Qty: 3.00

3

Cust Item ID:

Required Date: 4/5/2017 Req'd Qty: 3.00

3

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

270

QC21- Final Inspection - Work Order Release

0.00

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QC

Memo

0.30

Quality Control

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Picklist Print

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Parent Item: D350-591-113

D350-591-113

Parent Item Name: Heli-Access Step, Short, High Gear

Start Date: 3/22/2017

Required Date: 4/5/2017

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP Rev:H04.11.09ReformatKJ/JLM
ECN10-586 10.06.18 DD verf:EC

IPP Rev:E as per

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2244-116		Manufactured	No			110	Each	85.0000	1	3			
D2244-116									**			2017/03/22	
Step Extrusion													

Location

Loc Qty

Loc Code

WA003

84.9999632

~~B1266~~ B180064 → 2

117818

1

B117818 → 1

150064

84

D2275

D2275

Bushing

Manufactured No

130

Each

12.0000

1

3

**

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Location

Loc Qty

Loc Code

WA003

12

154822

12

3

D2582

D2582

Hi-Skid Step Leg Assembly

Manufactured No

170

Each

18.0000

1

3

**DAS
24
9-89

3x

C 17-03-24

Location

Loc Qty

Loc Code

WA003

18

155534

3

157228

5

158046

10

1x

2x

Picklist Print

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D350-591-113

Parent Item Name: Heli-Access Step, Short, High Gear

Start Date: 3/22/2017

Required Date: 4/5/17

Start Qty: 3.00

Required Qty: 3.00

✓ D2673-34
D2673-34
End Plate

Manufactured No 130 Each 27.0000

2 6

** 17-3-24 Cpl

Location	Loc Qty	Loc Code
WA003	27	
152320	8	
157298	19	

86

K591-113

Manufactured No 240 Each 7.0000

1 3

K591-113
Short Step Installation

**

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Location	Loc Qty	Loc Code
EG125	7	
153371	4	
155866	1	
157170	2	

1

DAS
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MS20600-AD4W3

Purchased No 170 Each 442.0000

16 48

✓ *MS20600-AD4W3*
Cherry Rivet

**

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Location	Loc Qty	Loc Code
ST308	174	
m135603	174	
WA003	268	
m136648	268	

48

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Shop Packet Print



DESIGN KE	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2310	REV. D SHEET 1 OF 2
DATE 05.11.14		TITLE HIGH SHORT STEP ASSEMBLY	SCALE NTS
A	94.11.10	NEW ISSUE	
B	97.05.22	END CAPS CHANGED	
C	97.07.23	ADDED BUSHING AND FACING INFO	
D	05.11.14	UPDATE FINISHING NOTE	

mf
#158409

D2310 HIGH SHORT STEP ASSEMBLY PARTS LIST

Part No.	Description	QTY
D2310	High Short Step Assembly	X
D2244-62.0	STEP EXTRUSION*	1
D2275	BUSHING	1
D2582	STEP LEG ASSEMBLY	1
D2673-34	STEP END PLATE	2
MS20600AD4W3	Rivets	16 ²

*cut per drawing

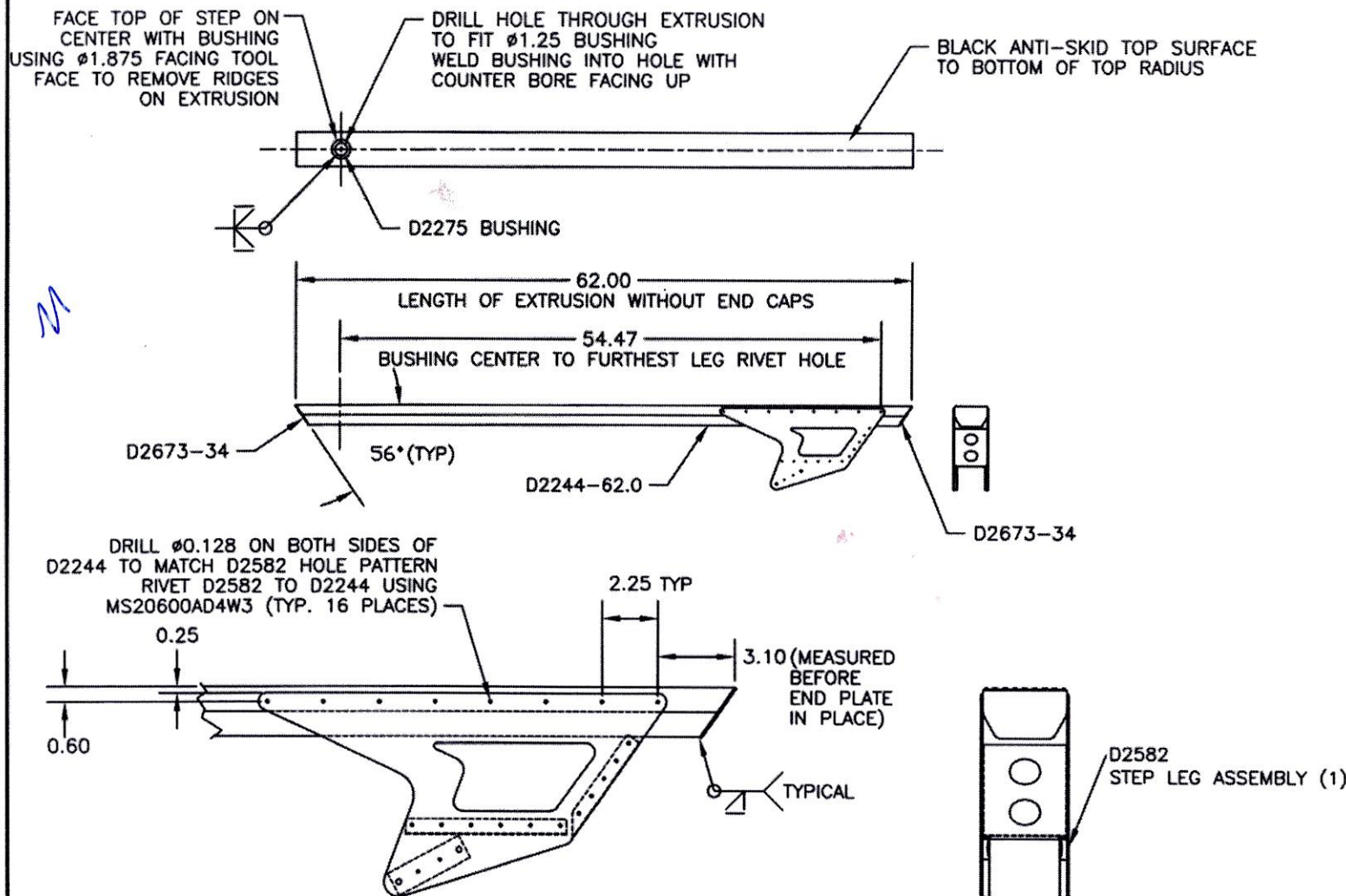
RELEASED
05.11.28 *[Signature]*

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DART

DESIGN	KE	DRAWN BY	PH	DART AEROSPACE LTD
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA
DATE	05.11.14	DRAWING NO.	D2310	REV. D
		TITLE	HIGH SHORT STEP ASSEMBLY	SHEET 2 OF 2
		SCALE	NTS	



STEP LEG DETAIL

D2310 HIGH SHORT STEP ASSEMBLY

- 1) MAKE FROM D2244 STEP EXTRUSION
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

RELEASED
05.11.28